CLEVELAND OPPORTUNITY CORRIDOR
OHIO DEPARTMENT OF TRANSPORTATION

Indirect and Cumulative Effects (ICEA) Technical Memorandum

Opportunity Corridor
Cuyahoga County, OH

Submitted to:

Ohio Department of Transportation
5500 Transportation Blvd
Garfield Heights, Ohio 44125

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July 2012

HNTB

Indirect and Cumulative Effects Assessment (ICEA) Technical Memorandum

CUY - Opportunity Corridor Project, PID No. 77333

Cuyahoga County, Ohio

Prepared for

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July 2012

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EXECUTIVE SUMMARY

The Opportunity Corridor project involves the construction of a new arterial roadway (urban boulevard) within the City of Cleveland, Cuyahoga County, Ohio. The proposed urban boulevard would consist of a four- to five-lane typical section with turn lanes at intersections. It would extend from the I-490/E. 55th Street intersection in the west to the E. 105th Street/Chester Avenue intersection in the east. **Figure 1, Appendix A** shows the project study area and proposed alignment of the boulevard.

The purpose of the proposed Opportunity Corridor project is to improve transportation infrastructure, access, and mobility within a historically underserved, economically depressed area within the City of Cleveland. The proposed project is intended to improve system linkage and mobility, as well as to support planned economic development.

The time horizon for the indirect and cumulative effects assessment (ICEA) related to the proposed Opportunity Corridor project is the year 2040. Based on information from previously completed studies and impact analyses as well as the urban nature of the study area, some resource categories would not experience substantial indirect and cumulative effects as a result of the Opportunity Corridor project. Consequently, these resource categories were not assessed further. The following resource categories were evaluated further as part of the ICEA: land use; community resources; historic resources; and water resources.

The Opportunity Corridor project is anticipated to have neutral—and in some cases positive—indirect and cumulative effects on resources in the ICE study area. The project would support planned economic development through improved mobility, access, and system linkage, and is consistent with local redevelopment and investment efforts. The project would have an indirect effect on land use by supporting complementary development. However, this area has been previously urbanized, and several other actions will be necessary for the City to realize its future land use and economic vision for the ICE study area. Furthermore, the effects of complementary development will largely be determined by local plans and regulations guiding investment. It is anticipated that the Opportunity Corridor would have no indirect effect on historic resources. The project may provide indirect benefits to community services and low income and minority populations due to increased economic activity and job opportunities, as well as supporting the in-fill development necessary to strengthen and improve community cohesion. Additionally, the project would have a positive effect on regional water quality due to the proposed construction of a separate storm sewer system to accommodate storm water runoff from the roadway, limited increases in impervious surfaces, as well as local regulations and sustainability initiatives.

The Opportunity Corridor project would contribute to a positive cumulative effect on land, community and water resources in the ICE study area. Local planning initiatives and regulations seek to benefit these resources, and the Opportunity Corridor project—as one component of local planning initiatives—would support this effort. Also, the effects of complementary development and enhanced livability supported by the project would provide a positive cumulative effect to low income and minority populations in the ICE study area. There is no cumulative effect anticipated for historic resources.

Since the indirect and cumulative effects of the Opportunity Corridor are anticipated to be neutral or positive, there is no need for the project to mitigate adverse indirect or cumulative impacts.

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1.0 INTRODUCTION

The purpose of this technical memorandum is to:

- Describe the methodology for the indirect and cumulative effects assessment (ICEA) for the proposed Opportunity Corridor project;
- Assess the potential for indirect effects associated with the proposed project;
- Assess the potential for cumulative effects associated with the proposed project; and
- Assess potential minimization and mitigation measures, if appropriate.

1.1 PROJECT DESCRIPTION

The Opportunity Corridor project involves the construction of a new arterial roadway (urban boulevard) within the City of Cleveland, Cuyahoga County, Ohio. The proposed urban boulevard would consist of a four- to five-lane typical section with turn lanes at intersections. It would extend from the I-490/E. 55th Street intersection in the west to the E. 105th Street/Chester Avenue intersection in the east. **Figure 1, Appendix A** shows the project study area and proposed alignment of the Opportunity Corridor project.

Between the I-490/E. 55th Street intersection and Quincy Avenue, the proposed boulevard would generally be on new alignment. From Quincy Avenue to Chester Avenue, the roadway would be constructed along the existing E. 105th Street alignment. The boulevard would include a depressed, grassy median between E. 55th Street and Quincy Avenue. In addition, wide outside travel lanes would be provided for shared use with bicycle traffic. The proposed boulevard would also include a multi-use path on the south side of the roadway and a sidewalk on the north side of the roadway.

The proposed boulevard would have signalized intersections with Kinsman Road, E. 75th Street, E. 79th Street, Buckeye Road, Woodland Avenue, E. 93rd Street, Quincy Avenue, Cedar Avenue, Carnegie Avenue, Euclid Avenue, and Chester Avenue. Indirect signalized access would be provided to E. 55th Street using a quadrant roadway.

1.2 PURPOSE OF AND NEED FOR PROJECT

The purpose of the proposed Opportunity Corridor project is to improve transportation infrastructure, access, and mobility within a historically underserved, economically depressed area within the City of Cleveland.

The proposed project is intended to address the following need elements:

- Improve system linkage;
- Improve mobility; and
- Support planned economic development

1.3 METHODOLOGY

The methodology for the Opportunity Corridor project's ICEA is consistent with published guidance documents including, but not limited to, the following:

- *Considering Cumulative Impacts* (CEQ, January 1997);
- *Consideration of Cumulative Impacts in EPA Review of NEPA Documents* (EPA, May 1999);
- *Practitioner's Handbook for Assessing Indirect Effects and Cumulative Impacts* (Center for Environmental Excellence by AASHTO, May 2011); and
- *FHWA Technical Advisory T 6640.8A: Guidance for Preparing and Processing Environmental and Section (4) Documents* (FHWA, October 1987).

The ICEA for the Opportunity Corridor project primarily relies on secondary source information, such as existing geographic information system (GIS) databases, previous Opportunity Corridor project reports, City of Cleveland studies and planning documents, and quasi-governmental studies and initiatives.

1.4 TIME HORIZON

The City of Cleveland typically uses a ten-year horizon for its comprehensive planning process. The City's current comprehensive plan—*Connecting Cleveland 2020 Citywide Plan*—established the guiding vision for the future of Cleveland and its neighborhoods through the year 2020. The region's long range transportation plan, which was developed by the Northeast Ohio Areawide Coordinating Agency (NOACA)—the region's metropolitan planning organization—identifies the region's transportation goals and strategies through the year 2030. The Greater Cleveland Regional Transit Authority (GCRTA) uses its *Transit 2025 Plan* to prioritize investments in regional public transit facilities and services. The design year for the Opportunity Corridor project is 2040.

The time horizon for the ICEA is the year 2040. While this timeframe is further removed in time than the current regional long-range transportation plan and local land use plan, it is consistent with the design year of the project. Additionally, this timeframe is consistent with the City's current efforts to foster long-range economic development and investment in the neighborhoods within and adjacent to the Opportunity Corridor.

The study team conducted extensive coordination with the City of Cleveland, area Community Development Corporations (CDC's), the Greater Cleveland Partnership (GCP), and NOACA to refine and update assumptions for future land use, planned economic development, and population and employment growth projections through the year 2040. This information was used to develop certified design year traffic for the project, as well as to complete the indirect and cumulative assessment documented in this technical memorandum. The certified design year traffic was approved by ODOT on April 12, 2012.

2.0 INDIRECT AND CUMULATIVE EFFECTS (ICE) STUDY AREA

2.1 AREA TRENDS AND GOALS

During the latter half of the 19th century, railroads were constructed through the area surrounding Opportunity Corridor, which supported Cleveland's manufacturing base. The railroads formed a mix of bisected residential areas and factories, along which many of Cleveland's industrial workers settled. During the early to mid-20th century, European ethnic groups that had established roots in the area migrated to suburban areas in increasing numbers; while African Americans escaping the hostile racial environment in the South migrated into the area. Increased and widespread automobile use enabled

greater mobility for residents, the decentralization of business and, to some extent, disbanding of neighborhoods based on ethnic type.

By the middle of the 20th century, trucking had become more prominent in transporting industrial goods. This shift resulted in local businesses leaving in search of locations with better access to the interstate highway system, enhanced visibility and new infrastructure to support their business needs. The rail infrastructure that once serviced the industrial activity, along with the presence of the Kingsbury Run valley, now served as barriers to vehicular, bicycle and pedestrian access and mobility. As a result, businesses closed or relocated, employment opportunities declined, and neighborhoods experienced disinvestment.

The latter half of the 20th century was marked by population decline in area neighborhoods as population shifted from the City of Cleveland and Cuyahoga County to outlying suburbs and counties. This trend has continued to the present day. The declining population as well as the recent economic recession—and associated increases in unemployment and foreclosure rates—has led to a number of other negative trends affecting this area. Vacancy rates have increased, and the City of Cleveland has stepped up its efforts to demolish vacant and abandoned structures.

The increasing presence of vacant lots has diminished community cohesion, aesthetic appeal and, consequently, property values and the tax base. The area's environmentally-blighted sites (brownfield sites)—left behind from previous industrial uses—have further hindered investment. Disinvestment has also taken a toll on local cultural and historic resources, as deferred maintenance and abandonment have prompted demolition of some of these resources. Likewise, declining populations and a challenging economic climate have led to the closure of area churches and schools. These factors have led to the area surrounding the project to be termed the "Forgotten Triangle."

Recognizing these negative trends, the City of Cleveland has stepped up its efforts to increase economic development and investment in this area. Some of the goals that have been established—as articulated in the *Connecting Cleveland 2020 Citywide Plan* and local CDC plans—include the following:

- Clean-up and reuse Brownfield sites
- Reuse, demolish and reconstruct abandoned buildings
- Retain, support or expand existing businesses, institutions and local community developments
- Improve job opportunities for local residents
- Strengthen and improve the quality of neighborhoods

The City of Cleveland—working in coordination with the Ohio Department of Transportation and the Federal Highway Administration—has identified the Opportunity Corridor project as a specific initiative intended to help achieve the aforementioned goals.

2.2 OTHER MAJOR ACTIONS

As part of the effort to develop project-level traffic projections, the study team—working in coordination with NOACA and local CDCs—refined the regional Travel Demand Model (TDM) to incorporate identified planned development initiatives likely to take place by the year 2020, prior to the opening of Opportunity Corridor. Several of these planned developments constitute major actions that would have a considerable positive effect on the area's economic climate. It should be noted that none of these actions are contingent on the Opportunity Corridor project being constructed; however, some

may have been planned in anticipation of the project. These planned developments are shown in **Figure 2** and summarized in **Exhibit 1**, both located in **Appendix A**.

The Cleveland Clinic has assembled a new master plan to guide its future development. The master plan envisions 14 new buildings as well as a "green spine"—a nearly continuous corridor of outdoor plazas—extending from East 83rd St. to East 105th St. Thirteen of the new buildings will be adjacent to the spine, and two of these buildings are planned to be constructed in the next five years. The plan does not indicate the square footage or number of new employees, but a substantial increase in the Clinic's employment is anticipated.

In addition to these planned private developments, local public agencies have several other programs and initiatives intended to enable community and private investment in the ICE study area. The details of these programs and initiatives are discussed in the following paragraphs.

As part of its goal to clean-up and reuse brownfield sites, the City of Cleveland has applied for and been selected by the U.S. Environmental Protection Agency (EPA) to develop an area-wide plan for brownfields assessment, cleanup and subsequent reuse. This effort is funded through a grant from the Partnership for Sustainable Communities, which is an interagency partnership between the U.S. Department of Housing Urban Development (HUD), the U.S. Department of Transportation (DOT) and EPA. The HUD-DOT-EPA partnership is focused on helping communities nationwide improve access to affordable housing, provide more transportation options, and reduce transportation costs while protecting the environment. The City's plan is being closely coordinated with the proposed Opportunity Corridor project to maximize potential positive outcomes.

In addition to the area-wide plan, the City's Economic Development Department manages the Brownfield Development Program. The purpose of this program is to identify sites for sustainable redevelopment while re-using existing infrastructure, protecting City residents and the environment, and creating and maintaining jobs. The program also provides support to developers and businesses interested in redevelopment. One component of the Brownfield Development Program is the Industrial-Commercial Land Bank, which enables the City to complete assessments, acquisition, consolidation, demolition and environmental clean-up to create ready-to-build land for expanding or new businesses. The City of Cleveland's Community Development Department and Cuyahoga County also have land bank programs intended to eliminate vacant, blighted properties and return them to productive use. These initiatives are active in the ICE study area and will continue to provide a positive effect on the area's development by enabling private sector investment where it otherwise might not occur.

Project Clean Lake is a program to help the Northeast Ohio Regional Sewer District (NEORSD) meet Clean Water Act standards and address water quality issues caused by raw sewage overflowing into waterways during rain events. NEORSD will invest $3 billion over 25 years to decrease the incidence of sewage overflow from its existing combined sewer system. The program's improvements include "gray infrastructure" (i.e., deep tunnel systems), treatment plant enhancements and "green infrastructure." Green infrastructure includes control measures to reduce the volume of stormwater entering the combined sewer system. NEORSD is working with the City of Cleveland to assess the use of vacant lots for green infrastructure projects and leverage economic development opportunities in planned redevelopment areas, including the Opportunity Corridor. According to the NEORSD Green Infrastructure Plan, there are three candidate green infrastructure capital projects in the ICE study area, amounting to an investment of approximately $23 million dollars by the year 2020.

The Greater Cleveland Regional Transit Authority also has several major projects underway or recently completed within or in proximity to the ICE study area, including:

- HealthLine Bus Rapid Transit (BRT): Service began on October 24, 2008. According to RTA, this transportation project has helped catalyze approximately $4.7 billion in spin-off investment and 11.4 million square feet of new and planned development.
- East 55th Street Rapid Station: Construction completed in Fall 2011. This station is one of the few stations that serves the Red, Blue, and Green lines, connecting east side and west side transit, and linking bus service to rail service.
- Buckeye–Woodhill Rapid Station Reconstruction: Construction started in June 2011 and funded through the American Recovery and Reinvestment Act (ARRA) of 2009. This station serves both the Blue and Green lines.
- University Circle Rapid Station Reconstruction: Construction anticipated to begin in late 2012. Construction funded through the Transportation Investment Generating Economic Recovery (TIGER) II grant program. The station is located adjacent to the Case Quad of Case Western Reserve University, John Hay High School and the School of the Arts, Little Italy and Fairfax neighborhoods, and dense student and senior housing.
- Mayfield Rapid Station Relocation: Construction anticipated to begin in early 2013 and funded through the Transportation Investment Generating Economic Recovery (TIGER) III grant program. The relocation of this station is part of a planned transit-oriented development near the intersection of Euclid Avenue and East 120th Street.

No other major actions affecting the ICE study area were identified in the Northeast Ohio Area-Wide Coordinating Agency (NOACA) *Connections 2030* regional long-range transportation plan, City of Cleveland's *Connecting Cleveland 2020 Citywide Plan*, and the Greater Cleveland Regional Transit Authority *Transit 2025* long-range plan.

2.3 ICE STUDY AREA BOUNDARIES

As part of the project development process, NOACA's regional TDM was refined to reflect changes in traffic volumes and patterns due to both the Opportunity Corridor roadway and future development and land use changes in the surrounding area. The analysis area for the TDM was based on existing Traffic Analysis Zone boundaries, known travel patterns, surrounding land use, existing transportation infrastructure, City and CDC planning areas, and known development initiatives. Therefore, the area analyzed during the TDM refinement served as an appropriate starting point for consideration of the project's cause and effect relationships to future land use changes. This boundary was designated as the preliminary ICE study area shown in **Figure 2, Appendix A**.

Once the preliminary ICE study area was identified, available data was used to further refine the boundary. During this process, the study team used information collected from the local CDCs, the City of Cleveland and the Greater Cleveland Partnership (GCP) to develop a better understanding of planned developments (see **Figure 2, Appendix A**).

The study team also used the GCP-commissioned "High-level Land Use Analysis and Economic Impact Analysis"—an independent market demand assessment—to determine the feasibility and extent of economic development opportunities (see **Figures 3A-3D, Appendix A**). The assessment focused primarily on what effect, if any, the Opportunity Corridor project would have on future development.

Based on the results of this study, potential complementary growth associated with the Opportunity Corridor would likely be confined to a smaller area than the preliminary ICE study area. Portions of the eastern and western ends of the project are expected to be fully built out by the time the project is constructed. The eastern portion of the study area includes the Cleveland Clinic, which is anticipated to generate development regardless of the Opportunity Corridor project. In addition, other portions of the preliminary ICE study area did not indicate any reasonably foreseeable growth by the year 2040.

As a result, areas that were projected to be fully built out and areas that were not projected to develop were removed from the preliminary ICE study area. The result was a targeted area in which the project would likely have a reasonably foreseeable influence on future land use patterns. This refined, targeted area was designated as the final ICE study area (see **Figures 3A-3D, Appendix A**).

2.4 NOTABLE FEATURES

Notable features within the ICE study area were identified using existing local, state, and federal geographic information system (GIS) databases and documentation prepared as part of other project-related studies. Notable features identified included community facilities (e.g., parks, churches, police/fire/health services, etc.), historic resources, water resources (e.g., streams, rivers, floodplains, wetlands, etc.), and special/hazardous waste sites. The ICEA focused on potential indirect and cumulative effects to the notable resources identified on **Figure 4, Appendix A.**

2.5 RESOURCES

Based on information from previously completed studies and impact analyses as well as the urban nature of the study area, some resource categories would not experience substantial indirect and cumulative effects as a result of the project. Consequently, these resource categories were not assessed further. Resource categories that could be subject to indirect and/or cumulative effects were evaluated further. **Table 1** identifies the resource categories considered, as well as the rationale for including or excluding them from further indirect and cumulative effects assessment.

Table 1 ICEA Resource Screening Matrix

Resource	Rationale for Including/Excluding from Detailed ICEA	Detailed ICEA? (Yes/No)
Agricultural Lands	Urbanized area with no agricultural lands → No direct, indirect or cumulative effects.	No
Air Quality	The project is contained in the fiscally constrained portion of the regional long range transportation plan, which meets transportation conformity requirements. The project-level air quality assessment is currently in progress. However, no violations of National Ambient Air Quality Standards are anticipated. By providing more direct access between I-77/I-490 and the University Circle employment center, it is anticipated that Vehicle Miles of Travel (VMT) would be reduced. Consequently, a proportional decrease in Mobile Source Air Toxics (MSAT's) is anticipated. The proposed project could also provide a cumulative air quality benefit by providing relief to congested intersections such as E. 55th Street/Woodland Avenue/Kinsman Road.	No
Archaeology and Historic Resources	No direct effects on archaeological and historic resources. The project would provide transportation infrastructure to support planned development in the area. Complementary development could have an effect on historic resources, particularly given the past trends in preservation (or lack thereof).	Yes (*Historic Only*)
Community Resources	Direct project impacts include relocating residences and businesses, most of which are in low income and minority areas. No negative direct effects are anticipated for community facilities or services. Complementary growth associated with the project could have an effect on existing and planned community resources as well as low income and minority populations.	Yes
Land Use	The project would provide transportation infrastructure to support planned development in the area. Complementary development—and the project itself—could result in land use change.	Yes
Natural Resources	Urbanized area with no natural habitat or threatened/endangered species → No direct, indirect or cumulative effects.	No
Water Resources	No direct effect to water resources or water quality is anticipated as a result of the project. The proposed construction of a separate storm sewer system for the Opportunity Corridor boulevard could have an indirect and/or cumulative effect on downstream water quality. In addition, portions of Doan Brook and its floodplain are located in the ICE study area. Complementary growth associated with the project could have an effect on Doan Brook.	Yes
Wetlands	Urbanized area with no wetlands → No direct, indirect or cumulative effects.	No

Based on the evaluation of potential indirect and cumulative effects, the following resource categories were evaluated further as part of the ICEA:

- Land use;
- Community resources;
- Historic resources; and
- Water resources.

The potential indirect and cumulative effects to these resources are further discussed in Section 3.

3.0 INDIRECT AND CUMULATIVE EFFECTS ASSESSMENT

3.1 INDIRECT EFFECTS

3.1.1 Land Use

The Opportunity Corridor project would improve access and mobility within the ICE study area. Additionally, some time savings are anticipated to result from a more direct connection between the Interstate system and the local neighborhoods, including University Circle. The project would also provide new transportation infrastructure. As a result, the project is expected to support revival and redevelopment within an urbanized area known as the "Forgotten Triangle" and surrounding areas. It is also expected to provide the transportation network to support planned development and job growth initiatives.

As stated earlier, in 2011, the GCP commissioned a "High-level Land Use Analysis and Economic Impact Analysis" for the preliminary ICE study area. The purpose of this study was to evaluate the potential complementary economic benefits associated with the proposed Opportunity Corridor project. The study compiled information to make projections about the feasibility and extent of economic development opportunities that could be supported by the project. This effort provided the City and GCP with information on where, when, and what types of complementary development would likely occur within the ICE study area. The potential growth opportunities were then distributed across ten-year planning horizons (2020, 2030 and 2040). This information was used to develop design year traffic projections, as well as to understand the potential for land use changes resulting from the project.

This study concluded that potential land use changes within the area could consist of a mix of residential, service, office, and light industrial development/redevelopment (see **Figures 3A-3D, Appendix A**). This includes eliminating the areas of fragmented and often incompatible land use that currently exist and creating areas of common, complementary land use. Light manufacturing uses would remain and expand into adjacent areas as appropriate. Retail and office uses would occur along roadway frontages. Some existing—although fragmented—residential areas would be replaced with light manufacturing and/or office space. These displaced residential areas would be consolidated with remaining local neighborhoods, providing the necessary in-fill to strengthen, improve, and protect communities within the ICE study area.

The potential land use changes described above are consistent with current trends, the City's comprehensive plan, and recent revitalization efforts by both the City and GCP. The Cleveland Clinic and other University Circle institutions have historically been a major influence on development activities and land use change within the eastern limits of the ICE study area. This influence is anticipated to continue and is not contingent on implementation of the project. Furthermore, the combined revitalization efforts of the City and GCP are focused on promoting development within the "Forgotten Triangle," regardless of whether the project is implemented. However, the project is anticipated to accelerate the timing and intensity of development. In addition, improved accessibility, reduced travel times, and increased frontage provided by the proposed project could make the study area more attractive for development.

While the proposed boulevard is anticipated to support planned development and land use change, the area has been previously urbanized and is only one of several distinct actions that are necessary for

change to occur. Market conditions in the ICE study area are generally more depressed than adjacent areas in Cleveland, which are below the national average. The current economic recession has exacerbated this situation.

The right market conditions must exist for development to occur. Due to economic decline in this area, additional investments in physical infrastructure beyond those included in the Opportunity Corridor project (e.g., utilities and local road improvements) are needed to support growth. In addition, land will need to be consolidated from existing property owners. Redevelopment on existing brownfield sites could require environmental site assessments, environmental risk assessments, remedial action plans, clean-up activities and regulatory permits. Lastly, complementary development will be subject to local controls such as zoning, stormwater management requirements, and review by the Cleveland Planning Commission. These required actions assure that rapid, unconstrained growth will not occur. Rather, development will be planned in conjunction with local officials, which will promote consistency with the local community's vision.

Land use change within the ICE study area may also indirectly affect the other resources advanced for further evaluation. These potential effects are discussed below.

3.1.2 Community Resources

As stated in the previous section, the proposed project would provide transportation infrastructure to support planned development in the ICE study area. Several community resources are located within areas projected to undergo land use change (see **Figure 4, Appendix A**). For instance, churches, libraries, police stations, fire stations, schools, parks and playgrounds are located within areas projected to transition to light manufacturing and/or office uses. Some of these resources could be eliminated and/or relocated as land use change occurs. However, these impacts are not reasonably foreseeable, as other actions affecting these resources are unknown.

Complementary development could also help to establish (and re-establish) community resources, resulting in a positive indirect effect. Complementary development would expand the tax base, freeing up additional revenues for the provision of community resources. Since the anticipated development would be in line with the City's vision—which places an emphasis on maintaining and expanding community resources—it is unlikely that it would overburden existing resources. In addition, since development activities will be coordinated through the City, potential impacts to public facilities will be addressed as part of the development efforts. Consequently, it is anticipated that the Opportunity Corridor project will have a neutral to positive indirect effect on community resources.

Development and land use change is also projected to occur in areas with a relatively high proportion of low income and minority populations. The approximate location and types of anticipated development are shown in **Figure 3D**. **Figures 5A and 5B, Appendix A** show existing and future land use, respectively. As shown in **Figure 5B**, the City's vision for development and land use change within the ICE study area would gradually transition areas of fragmented and often incompatible land uses to more consistent and complementary land uses. In a few specific areas, this would involve conversion of existing residential uses to non-residential uses such as light manufacturing, retail, or service-office. These changes would occur in two primary areas:

- The area bounded by E. 55th Street, Woodland Avenue, E. 71st Street, and the GCRTA Red Line; and
- The area bounded by the GCRTA Red Line, Buckeye Road and the GCRTA Blue-Green Line.

Overall, approximately 29% of the land within the ICE study area is currently vacant. In the areas listed above, over 40% of the existing land is currently vacant. Consequently, there are ample opportunities for complementary development to occur without displacing or negatively affecting low income and minority residents and businesses.

The relatively high number of vacant parcels in the ICE study area has transformed areas that once supported strong, cohesive communities into areas dominated by isolated residences, dilapidated properties, and incompatible land uses. Additional relocations in these areas are not expected to result in negative impacts to the fabric of the communities, as historic decline in these areas has already resulted in fragmentation of these areas. Furthermore, due to the nature of planned development, any residential and business displacements would likely be voluntary in nature. Should existing residents choose to relocate, replacement housing would be available in nearby neighborhoods. Residential land uses would be consolidated within the remaining local neighborhoods, providing the in-fill necessary to strengthen and improve community cohesion within the ICE study area. Additionally, non-residential in-fill development resulting from the project could enhance access to employment opportunities for existing local residents.

Future economic growth would also increase the tax base, which could increase property values within the study area. Although the potential future economic conditions cannot be predicted with any certainty, it is possible that increased property values could result in an increased tax burden for residents in low-income areas. However, increased property values could also provide property owners the opportunity to sell within existing blighted areas.

Given the information described above, indirect effects to low income and minority populations as a result of the Opportunity Corridor project are anticipated to be at least neutral and potentially a benefit.

3.1.3 Historic Resources

Complementary development could affect historic resources as new development and redevelopment competes with these resources. Specifically, a limited number of historic resources exist in areas that are projected to transition to light manufacturing and office uses (see **Figures 3A-3D, Appendix A**). However, local, state and federal regulatory mechanisms, as well as committed non-profit organizations, exist to minimize potential negative effects on historic and cultural resources. As indicated in the City of Cleveland's comprehensive plan, preservation of historically significant buildings and districts is a priority. This plan also promotes the synergy of economic development efforts and historic preservation efforts. In addition, all new development must undergo review by the Cleveland Planning Commission. Furthermore, portions of the Burton, Bell, Carr; Broadway; University Circle; and Broadway Design Review Districts are located in the ICE study area. Within these designated Design Review Districts, all new construction and exterior alterations to buildings and structures are subject to design review. This local oversight will facilitate the preservation of existing historic resources within the ICE study area.

Given the limited number of historic resources in the ICE study area, existing preservation efforts and local land use controls, indirect effects to historic resources as a result of the Opportunity Corridor project are anticipated to be neutral.

3.1.4 Water Resources

The project would provide a separate storm sewer system to accommodate drainage from the proposed roadway, and best management practices (BMPs) would be used in the system's design. This system would reduce the flow of storm water into the existing combined sewer overflow (CSO) system, increasing CSO system capacity and reducing the likelihood of CSO discharges within and downstream of the ICE study area. Use of BMPs in the proposed storm water system would treat both water quantity and quality, benefiting downstream water quality.

The study area is urbanized; therefore, no substantial increase in impervious surface is anticipated from complementary development. Development could occur in the Doan Brook 100-year floodplain, located in the northeast portion of the study area. In addition, stormwater from development could outlet into the open water and culverted portions of Doan Brook. Any potential complementary development would be subject to local floodplain review and permitting requirements and would have to meet NEORSD's requirements for maintaining pre-construction run-off volumes in the CSO system. Furthermore, the City of Cleveland and the NEORSD are focused on sustainability and green initiatives as part of future infrastructure and community investments.

Given the proposed installation of a separate storm sewer system, limited increases in impervious surfaces and local regulations and sustainability initiatives, it is anticipated that the Opportunity Corridor project will have a positive effect on regional water quality.

3.2 CUMULATIVE EFFECTS

3.2.1 Land Use

The area surrounding the proposed Opportunity Corridor is economically depressed with blighted and dilapidated buildings dominating the landscape. Over time, the loss of manufacturing jobs and other employment opportunities has led to disinvestment within the study area. Some of the remaining residential and commercial land uses would be directly converted to transportation uses to construct the project. The proposed project would improve access and mobility within the ICE study area, which would support planned residential, commercial and industrial development. However, realizing this growth is reliant on several other distinct actions, as discussed in previous sections. Complementary development associated with the project would be consistent with locally adopted land use plans and current economic development initiatives.

Additionally, implementation of the strategies from NEORSD's Green Infrastructure Plan would provide opportunities for vacant land reuse and economic development. The brownfield redevelopment initiatives being championed by the City and its partners would also enable the conversion of blighted land to more optimal uses. Along with these efforts, the Opportunity Corridor project will provide the transportation framework to support planned development and land use change.

The Opportunity Corridor project is anticipated to contribute to a positive cumulative effect on land resources in the ICE study area.

3.2.2 Community Resources

Communities within the study area have been subject to steady decline during the past several decades as businesses have closed or relocated, employment opportunities have declined, and population has decreased. Over time, vacancy rates have increased, which has diminished community cohesion, aesthetic appeal and, consequently, property values and the tax base. Likewise, area churches and schools have closed. The area is also dominated by environmentally-blighted sites (i.e., brownfield sites)—left behind from previous industrial uses.

The direct effects associated with the Opportunity Corridor project include relocating residences and businesses within the ICE study area. Property owner rights will be protected under the Uniform Act, and ODOT will work with residents and businesses wishing to remain in the community to help identify replacement property nearby.

The City of Cleveland's vision for the ICE study area encourages investment that will create areas of well-planned, compatible land uses. Low income and minority populations will be affected by on-going growth, and isolated and fragmented communities will be replaced with other land uses. However, redevelopment and in-fill would restore the vitality and cohesion of other area neighborhoods and help to reverse the historic trend of disinvestment and depletion of community resources. The Opportunity Corridor project will directly contribute to this effort by improving multi-modal connectivity and mobility. This will enhance access to jobs and community resources—both existing and planned—for local residents. Additionally, public safety and emergency services would likely benefit due to the improved efficiency of the transportation grid. These positive effects would ultimately enhance the livability of the ICE study area.

The City's Brownfields Redevelopment Program and the NEORSD's Green Infrastructure Plan will encourage investment in real estate that otherwise may not take place. These efforts will reduce the amount of vacant and blighted land in the ICE study area, contributing to the city's vision for revitalization of local neighborhoods. Redevelopment efforts, including the Opportunity Corridor project, will likely have an upward effect on property values and the area's tax base. Depending on the city's prioritization of these increased tax revenues, the ICE study area could experience increased public sector investment in public services and community resources.

Opportunity Corridor project is anticipated to contribute to a positive cumulative effect to community resources and low income and minority populations in the ICE study area.

3.2.3 Historic Resources

In the past, historic resources have generally been depleted due to lack of preservation. However, this trend will be tempered by existing regulatory mechanisms and increased local focus on preservation. No directs effects and minimal indirect effects are anticipated as a result of the Opportunity Corridor project. Additionally, other effects to historic and cultural resources are not reasonably foreseeable, as other actions affecting these resources are unknown. As a result, no cumulative effects are anticipated.

3.2.4 Water Resources

NEORSD's Project Clean Lake will decrease the incidence of sewage overflow from its existing combined sewer system by constructing gray infrastructure (i.e., deep tunnel system), treatment plant enhancements and green infrastructure. These improvements will improve water quality in the ICE study area and the region. The Opportunity Corridor project would provide a positive contribution to water quality through construction of a separate storm sewer system. This system would accommodate roadway drainage that otherwise would have drained into the CSO system. Additionally, the study team is partnering with NEORSD to determine if their proposed Green Infrastructure Plan improvements can be implemented in tandem with the Opportunity Corridor project. In addition, complementary development associated with the Opportunity Corridor project is likely to have a neutral to positive effect on regional water quality due to local regulations and green/sustainability initiatives.

It is anticipated that the Opportunity Corridor project would contribute to a positive cumulative effect to water quality in both the ICE study area and regionwide.

4.0 SUMMARY

The Opportunity Corridor project is anticipated to have neutral—and in some cases positive—indirect and cumulative effects on resources in the ICE study area. The project would support planned economic development through improved mobility, access, and system linkage, and is consistent with local redevelopment and investment efforts. The project would have an indirect effect on land use by supporting complementary development. However, several other actions will be necessary for the City to realize its future land use and economic vision for the ICE study area. Furthermore, the effects of complementary development will largely be determined by local plans and regulations guiding investment. It is anticipated that the Opportunity Corridor would have no indirect effect on historic resources. The project may provide indirect benefits to community services and low income and minority populations due to increased economic activity and job opportunities. Additionally, the project would have a positive effect on regional water quality as a result of the proposed construction of a separate storm sewer system to accommodate storm water runoff from the roadway, limited increases in impervious surfaces, as well as local regulations and sustainability initiatives.

The Opportunity Corridor project would contribute to a positive cumulative effect on land, community and water resources in the ICE study area. Local planning initiatives and regulations seek to benefit these resources, and the Opportunity Corridor project—as one component of local planning initiatives—would support this effort. Also, the effects of complementary development and enhanced livability supported by the project would provide a positive cumulative effect to low income and minority populations in the ICE study area. There is no cumulative effect anticipated for historic resources.

Since the indirect and cumulative effects of the Opportunity Corridor are anticipated to be neutral or positive, there would be no need for the project to mitigate adverse indirect or cumulative impacts.

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Appendix A – Exhibits and Figures

Exhibit 1: Past, Present, and Planned Developments

	General Information								Businesses								Residential		
Current/Planned Development Projects	Development project description	Location	Planned TAZ boundary	CDC	Source	Land Use	Estimated Completion	In place regardless of OC	Currently in NOACA's model	New facility or relocated?	If relocated, from where	Previous TAZ boundary	If relocated, estimated # of jobs moved	Estimate # of new jobs:	Building Size	# of residential displacements	# of job displacements	Estimate # of new units	# of residential displacements	# of job displacements
Buckeye Area Development Corporation																				
St. Lukes Pointe	The redevelopment of the former Saint Luke's Hospital site (vacant since 1995) is planned in three phases. Phase I (72 units) and Phase II (68 units) are currently funded. Phase III includes 60,000 of office space available but is not yet funded. 60 units are also planned to be constructed in the old parking lot area.	Shaker Boulevard and E. 116th Street	282	BADC	Website and phone conversation with John Hopkins on 8/23/2011	Residential/ Office Space	Phase I - 2012, Phase II - 2013, Phase III - 2018	Yes	Yes	New	N/A	N/A	N/A	*240**	60,000 sq ft	0	0	200	0	0
Burten Bell Carr Development Corporation																				
Bridgeport Place	Bridgeport Place, an exciting $2.2 million new-construction development project at Kinsman Road and East 72nd Street, consists of 13,200 square feet of new retail an commercial space that accommodates the new offices of Burten, Bell, Carr Development, Inc. The commercial center also includes the new Cleveland Public Library Garden Valley branch and 5/3 Bank ATM. The grand opening and ribbon cutting for Bridgeport Place took place Wednesday, April 16, 2008.	Kinsman and E. 72nd Street	278	BBCD	Website and meeting with Tim Tramble on 08/08/2011	Retail	April-2008	Yes	Yes (counts done after facility opened)	New	N/A	N/A	N/A	N/A	13,200 sq ft	0	0	N/A	N/A	N/A
Kingsbury Crossings	Kingsbury Crossings will consist of a 60,000-square-foot new-construction mixed-use center to be built at the intersection of Kinsman Road (US Highway 422) and East 93rd Street. It will provide much-needed services to the Kinsman-Union neighborhoo and the greater community. Kingsbury Crossings, formerly referred to as the Kinsman Square Plaza Redevelopment Initiative, is elaborately designed to create a strong presence and make a profound impact both on the immediate neighborhood and on a much wider scale. Greenspace and passive recreational areas are also planned as part of the development.	Kinsman and E. 93rd	936	BBCD	Website and meeting with Tim Tramble on 08/08/2011	Mixed Use	2015	Yes	No	New	N/A	N/A	N/A	N/A	60,000 sq ft	0	0	N/A	N/A	N/A
CMHA Headquarters	The CMHA Administrative Headquarters brings together nearly 400 CMHA employees from different departments and offices at one centralized site, located near many of the CMHA public housing developments. The facility encompasses bo an administrative building and service building, and will assist CMHA in providing comprehensive, more efficient, services and resources to the resident, clients, and other persons doing business with CMHA.	8120 Kinsman Road	293	BBCD	Website and meeting with Tim Tramble on 08/08/2011	Office	June-2011	Yes	No	New/relocated	Throughout Cuyahoga County	Throughout Cuyahoga County		400 employee 400 visitors/day	Not required because estimated number of Jobs/Visitors has been provided	0	0	N/A	N/A	N/A
Maingate Market Place	The first major stage in bringing the Maingate Market Place from a conceptual idea t a real project has been completed. During its meeting on Friday, March 19,the Cleveland City Planning Commission approved the master plan developed by Maingate for the now vacant corner at East 55th Street and Woodland Avenue. The proposed plan is for the development of a 12-acre, mixed-use urban marketplace featuring fresh food and related retail, commercial, and entertainment activities. A key component of the 100,000+ sq ft. complex will be 20,000 sq ft of all-weather, year-round retail selling space for produce from some of the 40-plus food wholesaler in the area. Cleveland planning director Robert Brown who heads the department said, "The Maingate [MarketPlace] plan to expand on the produce business is consistent with the city's plan to build on existing assets." Although this step is early the process of bringing the Market Place to reality, it is a crucial one that is garnering the support of the City and drawing interest from developers.	Southwest Quadrant of Woodland Avenue and E. 55th Street	159	BBCD	Tim Perroti at Maingate	Mixed Use	2015	Yes	No	New	N/A	N/A	N/A	500 (HNTB divided jobs among various employment categories based on the % of total square footage allocated to each use)	Drugstore– 15,000 sq ft Food distributor retail – 14,000 sq ft Specialty foods –2,500 sq ft Convenience retail –10,000 sq ft Public market (year round) –50,000 sq ft Farmers' market (seasonal) –20,000 sq ft Restaurants – 9,500 sq ft Greenhouse – 12,000 sq ft Bank – 5,000 sq ft Office – 130,000 sq ft Grand total – 268,000 sq ft	0	0	N/A	N/A	N/A
Green City Growers	A vast area of vacant land in the Central neighborhood will soon become home to an expansive greenhouse powered by hydroponic technology to be situated at Grand and Ensign Avenues and Kinsman Road. The Green City Growers Cooperative is an initiative of the Evergreen Cooperatives, launched by an initial investment from the Cleveland Foundation. BBC, in collaboration with the City of Cleveland Department of Economic Development, played a role in assisting with the real estate development and community outreach aspects of the project. The $20 million greenhouse, situated on ten acres, will utilize approximately five acre of growing area and is expected to produce five million heads of lettuce and leafy greens and three thousand pounds of herbs annually. This produce will then be marketed to grocery stores and food service companies in Cleveland, as well as customers within a 150-mile radius. Green City Growers will employ thirty-five residents from the Greater University Circle neighborhood, and as a social enterprise, will allow employees to become owners of the business and share in the profits of the company. An exciting aspect of the project is that a one-and-a-half-megawatt wind turbine, ten times more powerful that of the Great Lakes Science Center, will provide forty percent of the power to the greenhouse. The utilization of alternative energy is anticipated to produce an annual savings of $240,000 a year in electricity costs.	Grand and Ensign Avenues and Kinsman Road	277	BBCD	Website and meeting with Tim Tramble on 08/08/2011	Agricultural	March-2012	Yes	No	New	N/A	N/A	N/A	50	10 acres of land	0	0	N/A	N/A	N/A
Urban Agriculture Innovation	The BBC-led Urban Agriculture Innovation Zone will convert a large portion of the desolate "Forgotten Triangle" into a twenty-six acre green oasis. This initiative will position the Central, Kinsman, and Garden Valley neighborhoods and the city of Cleveland to become the forefront of the future eco-conscious economy and ultimately cultivate a new thriving neighborhood economy. The Urban Agriculture Innovation Zone will also provide income-generating jobs and entrepreneurial opportunities for new linkages to a variety of agricultural production cycles. It will include productive land re-uses such as bio-fuels, food production, phyto-remediation, water retention, and native plant nursery.	Off Kinsman Avenue between E. 83rd Street and the railroad tracks	289	BBCD	Website and meeting with Tim Tramble on 08/08/2011	Agricultural	2018	Yes	No	New	N/A	N/A	N/A	50 (estimated based on Green City Growers)	26 acres of land	0	0	N/A	N/A	N/A
Miceli's Expansion	Existing facility is 58,000 sq ft. Two phases are planned for expansion. Phase I will add 61,000 sq. ft. and construction will begin in August 2011. Phase II will add 240,000 sq. ft. and is scheduled to break ground in 2014 after site clean-up.	E. 90th Street and Buckeye Road	280	BBCD	Carol Kenney and Miceli's	Industrial	2015	Yes	No	New (expansion)	N/A	N/A	N/A	50	301,000 sq ft (includes Phase I and Phase II)	0	0	N/A	N/A	N/A
Orlando Expansion	Orlando recently added 16 new jobs to third shift. The expansion will consist of 40,000 sq ft of additional freezer space and another 20,000-30,000 sq ft of dry dock and packaging expansion. The timeline is immediate. With the freezer expansion, a additional 10-20 semi's would be in and out of the facility daily.	North of Grand Avenue between E. 75th and E. 79th Street	279	BBCD	John Orlando	Industrial		Yes	No	New (expansion)	N/A	N/A	N/A	16 jobs just added to night shift plus 20 expected from expansion	70,000 sq ft expansion	0	0	N/A	N/A	N/A

	General Information									Businesses								Residential		
Current/Planned Development Projects	Development project description	Location	Planned TAZ boundary	CDC	Source	Land Use	Estimated Completion	In place regardless of OC	Currently in NOACA's model	New facility or relocated?	If relocated, from where	Previous TAZ boundary	If relocated, estimated # of jobs moved	Estimate # of new jobs:	Building Size	# of residential displacements	# of job displacements	Estimate # of new units	# of residential displacements	# of job displacements
Heritage View Homes	BBC has partnered with the Cuyahoga Metropolitan Housing Authority (CMHA) and Falbo/Penrose on the redevelopment of the Garden Valley Estates, located between Sidaway Avenue and East 79 th Street, from Kinsman Road to Carson Avenue. This five-year, $100 million project calls for the replacement of approximately 628 units of antiquated public housing, only 70% of which had been occupied, dispersed throughout thirty acres with 275 townhomes, seventy-five units of senior housing, and thirty-two for-sale single-family homes. Phase I, which entails the construction of 81 units of public housing, was commenced by the Garden Valley Demolition Celebration, which took place on July 16, 2008. Phase I construction will be concentrated between Sidaway Avenue and East 71st Street along Kinsman Road. The Garden Valley/Kinsman Neighborhood Master Plan process, which was driven b the input of residents and other community stakeholders over the course of several public meetings, identified townhomes as the prevailing housing style. They desired for each unit to possess its own private outdoor space and closely-located parking. The plan also calls for new-construction single-family homes to be well integrated into the existing street grid where possible and for the physical and social boundaries	Along Kinsman Avenue between Sidaway Avenue and E. 73rd Street	932	BBCD	Website and meeting with Tim Tramble on 08/08/2011	Residential	Complete build out will be finished prior to 2020	Yes	No	New	N/A	N/A	N/A	N/A	N/A	N/A	N/A	140 Townhome 75 Senior Housing 19 single family homes _____ 234 total units	200	0
		Along Kinsman Avenue between E. 73rd Street and E. 79th Street	926	BBCD	Website and meeting with Tim Tramble on 08/08/2012	Residential	Complete build out will be finished prior to 2020	Yes	No	New	N/A	N/A	N/A	N/A	N/A	N/A	N/A	135 Townhome 13 single family homes _____ 148 total units	150	0
Hill Place & Dell Homes	Hill place is located at the southwest corner of East 75th Street and Woodland Avenue, and will be comprised of 80 newly-renovated for-sale townhomes. In the center of the project area will be 24 single-story new-construction cluster homes similar to the design of the homes of Gabriel's Green. Dell Avenue Homes, will bring an additional 42 single-family homes to the vacant lan south of Hill Place that is currently owned by Mt. Sinai Church.	E. 75th Street and Woodland Avenue	933	BBCD	Website and meeting with Tim Tramble on 08/08/2013	Residential	2013	Yes	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	66 new units (Phase I: 24 units, Phase II: 42 units)	0	0
Fairfax Renaissance Development Corporatio																				
Cuyahoga County Juvenile Justice Center	Construction of the Cuyahoga County Juvenile Justice Center (CCJJC) began in 2007 on a 12 acre site at the southeast corner of East 93rd Street and Quincy Avenue. The $160 million investment is creating a 630,000 square foot facility that creates a unique environment for the intervention, rehabilitation, education of youth offenders, ages of 10 through 18, in a secure environment, including a staff of 125. The CCJJC facility consolidates all court related and detention activities and replaces the former Cuyahoga County Detention Center. The nine-story tower accommodates the Juvenile Court system for the County. Secured parking is provided for Judges an related staff, other employees and the public.	Quincy Avenue and E. 93rd Street	273	FRDC	Website and meeting with Vickie Johnson on 08/18/2011	Institutional	2011	Yes	Yes (added specifically for OC)	New/Relocated	Throughout Cuyahoga County	Throughout Cuyahoga County		125	630,000 sq ft	0	0	N/A	N/A	N/A
Cleveland Clinic Heart Center	The Sydell and Arnold Miller Family Pavilion includes 279 patient rooms, and is adjoined by Glickman Tower, which houses the Urological and Kidney Institute. The pavilion and tower comprise 1.3 million-square-feet. The new pavilion and tower consolidate health care units that were formerly spread throughout the Cleveland Clinic campus. Both structures improve patient experience by increasing capacity, which means shorter waits for appointments and faster critical care transfers. Each building is easy to navigate and houses the services a patient needs, making it easier and faster to access treatment. And both feature the latest in clinical technology.	9500 Euclid Avenue (Euclid Avenue and E. 93rd Street)	78	FRDC	Website and meeting with Vickie Johnson on 08/18/2011	Medical	Fall 2008	Yes	No	New/Relocated	Throughout Cleveland Clinic Campus	Throughout Cleveland Clinic Campus		275	1.3 million sq. ft	0	0	N/A	N/A	N/A
Global Cardiovascular Innovations Center (GCIC)	In October 2006, Cleveland Clinic, FRDC and 18 educational and institutional partners applied for funding from the State of Ohio's Third Frontier Program to develop, among other things, the Global Cardiovascular Innovation Center (GCIC). The partnership was awarded a grant of $60 million to develop the GCIC Project. The primary purpose of GCIC is to accelerate the development and commercialization of cardiovascular technologies and products, thereby creating hundreds of new jobs in northeast Ohio. The 50,000 square foot research building constructed on the south side of Cedar Avenue between East 100th and East 101st Streets was completed in spring 2010. The $23 million project with its focus on the cardiovascular (CV) therapeutic area, which is estimated at more than $400 billion in the US, represents the single largest market opportunity within the $2.1 trillion healthcare sector. Cleveland Clinic and FRDC are working closely together to promote economic development and growth in northeast Ohio. This new GCIC accelerator will become the central incubator for CV companies and for spinning off new companies formed to develop and commercialize new CV technologies.	1000 Cedar Avenue (Cedar Avenue between E. 100th Street and E. 101st Street)	268	FRDC	Website and meeting with Vickie Johnson on 08/18/2011	Institutional	May-2010	Yes	No	New/Relocated	Carnegie Avenue and E. 103rd Street	78	?	*100**	50,000 sq ft	0	0	N/A	N/A	N/A
Karamu Campus	Karamu offers art experiences for people of all ages through a variety of programs. The three primary program areas are the Early Childhood Development Center, the Center of Arts and Education, and the Karamu Performing Arts Theatre. Karamu Campus plans to expand to the east acquiring additional 2.5 acres along Quincy between E. 90th Street and E. 93rd Street.	2355 E. 89th Street E. 89th Street and Quincy Avenue	267	FRDC	Meeting with Vickie Johnson on 08/18/2011	Institutional	2015	Yes	No	New	N/A	N/A	N/A	*156**	Expansion from 2.5 acres to 5 acres with acquired land east of E. 90th Street	0	0	N/A	N/A	N/A
Rumi's Market	A new food retailer, Rumi's Market will open by the end of 2011, and provide a grocery, restaurant, delicatessen, and catering services, and will feature a menu of Middle Eastern foods. The 16,000 square foot facility is new construction and located on the northwest corner of Carnegie Avenue at East 83rd Street.	Carnegie Avenue and E. 83rd Street.	77	FRDC	Website and meeting with Vickie Johnson on 08/18/2011	Retail	2011	Yes	No	New	N/A	N/A	N/A	*36**	16,000 sq ft	0	0	N/A	N/A	N/A
Shops at Emmanuel Square	Vacant land available for purchase between E. 79th Street and E. 82nd Street (across from Fairfax Renaissance Building). FRDC has had interest from several businesses to located here. Building could serve as office space, law offices, institutional, etc.	Quincy Avenue between E. 79th Street and E. 82nd Street	274	FRDC	Meeting with Vickie Johnson on 08/18/2011	Mixed Use	2013	Yes	No	New	N/A	N/A	N/A	*523**	3 acres available to build on	0	0	N/A	N/A	N/A
Tudor Arms Hotel (Doubletree Hotel)	The Project includes renovating existing Tudor Arms, a landmark building at the edge of University Circle, into a 154-room hotel, with a vintage swimming pool, a wood-paneled lobby and a floor of restored ballrooms and event spaces. The developers bought the building in 2007 from Case Western Reserve University and are tackling a $22 million project. The 11-story brick building has been empty since 2007, when the Cleveland Job Corps Center moved out. The project will include a 2,500 sq. ft. restaurant facing Stokes Boulevards on the firs floor, a ballroom on the second floor, 25,000 sq. ft. of office space on the third and fourth floor, and hotel room stretching from floors five through eleven.	Carnegie Avenue and E. 107th Street	269	FRDC	Website Meeting with Debbie Berry on 08/17/2011 Meeting with Vickie Johnson on 08/18/2011	Institutional	2011	Yes	No	New	N/A	N/A	N/A	*203* (100* new office jobs and 103* new restaurant jobs estimated)*	Floor 1: 2,500 sq ft restaurant Floors 3 & 4: 25,000 sq ft of office space Floors 5-11: 154 hotel rooms	N/A	N/A	N/A	N/A	N/A
Intergenerational Housing	The FRDC Intergenerational housing development project will address a low to moderate income housing market niche that is unique, badly underserved, and heavily strained by circumstance. The project will provide housing for 40 families of grandparents who have legal custody of their grandchildren. Presently, there are only six housing developments nationwide that have been specifically designed to address the housing needs of grandparents or kin who are raising their grandchildren. None exist in Ohio or the Great Lakes Region. The project is a mix of two, three and four bedroom townhomes designed in clusters. The design of the project is the result of a national design competition sponsored locally by the McGregor Foundation and has been in the planning stages for over three years. It will be located on Central Avenue between East 80th and East 83rd Streets and construction began in 2010.	Central Avenue between E. 80th Street and E. 83rd Street	266	FRDC	Website and meeting with Vickie Johnson on 08/18/2011	Residential	November-2012	Yes	No	New	N/A	N/A	N/A	N/A	N/A	N/A	N/A	40	0	0

	General Information									Businesses								Residential		
Current/Planned Development Projects	Development project description	Location	Planned TAZ boundary	CDC	Source	Land Use	Estimated Completion	In place regardless of OC	Currently in NOACA's model	New facility or relocated?	If relocated, from where	Previous TAZ boundary	If relocated, estimated # of jobs moved	Estimate # of new jobs:	Building Size	# of residential displacements	# of job displacements	Estimate # of new units	# of residential displacements	# of job displacements
Slavic Village																				
Hyacinth Neighborhood Plan	Feasibility Plan is currently taking place to develop 50 units of housing in a vacant area of the St. Hyacinth neighborhood	Maurice Ave. and E. 63rd Street	291	SVDC	Meeting with Marie Kittredge on 07/28/2011	Residential	2015	Yes	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	50	0	0
University Circle Incorporated																				
Cleveland Institute of Art (CIA)	Phase I of thecampus modernization and unification project, including the complete renovation of our Joseph McCullough Center for the Visual Arts, was finished in mid-December 2010. Phase II, the construction of a new building immediately west of an fully inter-connected to the McCullough building is planned for the next year	Euclid Avenue and E. 117th Street	61	UCI	Website and meeting with Debbie Berry on 08/17/2011	Institutional	2015	Yes	No	New/expansion	N/A	N/A	N/A	N/A	102,000 sq ft	N/A	N/A	N/A	N/A	N/A
Cleveland Museum of Art (CMA) Expansion	On March 7, 2005 the Cleveland Museum of Art embarked on a multi-year project to renovate, expand, and re-imagine the entire museum campus. Designed by world-renowned architect Rafael Viñoly, this historic and comprehensive undertaking will have left no part of our museum untouched when it is completed. More broadly, the renovation and expansion of the museum stands to play a leadership role in shaping the region's quality of life and economic rebirth. At a total cost of $350 million, it is the largest cultural project in the history of the state of Ohio and one of the most comprehensive renovation and expansion projects in the museum field anywhere in the nation. Renovations and repairs, which constitute two-thirds of the construction project, are critical to preserve and improve the campus infrastructure. Even more importantly, the project will provide over 30 percent more gallery space to accommodate growing collections as well as larger temporary exhibitions. New gallery spaces will allow the museum's world-renowned collections to be displayed in a more visually pleasing manner, and one that best tells the story of humankind's creativity over 5,000 years. The new museum campus will also provide additional space for public programming and events, a lifelong learning center, a new café, and many other visitor amenities. The new museum will feature the existing architectural landmarks of the 1916 Beaux-Arts south building and the 1971 north building by Marcel Breuer. Two new additions, east and west wings, will flank these landmarks—each ending in a dramatic glass-bo gallery providing panoramic views of the museum's park-like setting as well as enticing glimpses into the museum's public spaces. A third new structure—an atrium—will form the north wall and encompass a large courtyard with a soaring glas canopy to crown the center of the campus.	11150 East Boulevard	63	UCI	Website and meeting with Debbie Berry on 08/17/2011	Institutional	2013	Yes	No	New/expansion	N/A	N/A	N/A	*124**	203,000 sq ft (new space)	0	0	N/A	N/A	N/A
CWRU West Campus	The purchase of the 14-acre West Quad site in 2000 has provided CWRU with the opportunity to explore ways of developing or expanding activities that both serve the institution's academic aims as well as strengthen its links with the community. In initial overview, the University proposed development of four clusters on the West Quad site, (1) a Community Life Center , (2) Biomedical Research and Innovation Center , (3) an Advanced Technology Commons, and (4) an Entrepreneurial Development Program. Following extensive discussions with residents, community leaders, and other organizations in the community, Case Western Reserve University envisions a Community Life Center designed to be multi-disciplinary – "inter-professional"- and to have features that respond primarily to client and community needs as well as to academic needs. At the heart of the concept is the presumption that addressing thes diverse needs in a coordinated way will benefit all participants.	E. 105th Street and Mt. Sinai Drive	64	UCI	Website and meeting with Debbie Berry on 08/17/2011	Institutional		Yes	No					*200**	100,000 sq ft (per E. 105th/ MLK Traffic Study)			N/A	N/A	N/A
CWRU Performing Arts	Case Western Reserve University and The Temple – Tifereth Israel have announced an historic partnership with a lead donation of $12 million from the Maltz Family Foundation of the Jewish Community Federation of Cleveland. The gift represents a catalytic challenge for the transformation of The Temple's iconic building in University Circle into the Milton and Tamar Maltz Performing Arts Center. The initiative also will preserve the historic building as a place of worship and celebration for the 1,400 families of The Temple - Tifereth Israel community. Plans call for the creation of a performing arts venue to feature programs and performances from the music, dance and theater departments. The 100,000 square-foot facility will also feature rehearsal rooms, classrooms and faculty offices.	1855 Ansel Road	64	UCI	Website and meeting with Debbie Berry on 08/17/2011	Institutional	2013	Yes	No					*61**	100,000 sq ft	0	69 in school category (Charter school in the current space will be displaced)	N/A	N/A	N/A
Lot 45	Plans for a mixed-use development and intermodal facility on Lot 45 are still under way. UCI submitted several requests in 2009 that are being considered for federal and state funding. The potential for retail, residential, structured parking, and office development is strong at this location, and could be built in conjunction with the Uptown development, adjacent institutional expansion, Mayfield Road streetscape improvements, and the construction of the new Mayfield Road Rapid Station by the Greater Cleveland Regional Transit Authority.	Mayfield Road between E. 116th Street and E. 117th Street	61	UCI	Website and meeting with Debbie Berry on 08/17/2011	Mixed Use	2016	Yes	No	New	N/A	N/A	N/A	*1600* office jobs, 223* retail jobs*	a 750-car garage 100,000 sq ft of ground floor retail 400,000 sq ft of office space	0 - replaces a 200 space surface lot		N/A	N/A	N/A
Museum of Contemporary Art (MOCA)	Currently under construction, MOCA's new nearly 34,000-square-foot building will be located at the intersection of Euclid Avenue and Mayfield Road. The new MOCA is a flagship project of Cleveland's emerging Uptown district, a major urban-revitalization project undertaken by Case Western Reserve University; developer MRN, Ltd.; and other institutions in the University Circle neighborhood. The Museum will serve as a catalyst for creativity and growth in the area—which is home to one of the country's largest concentrations of cultural, educational, and medical institutions—with greatly expanded educational and public programs, as well as imaginative collaborations wi neighboring organizations and cultural partners. Positioned within University Circle's academic life, art school activity, and cultural offerings, MOCA will realize its dynamic potential. It will infuse this new district with energy and life, day and night. The building is designed to showcase a program of internationally emerging art in flexible gallery spaces. The lobby is designed as an urban living room, a place for visitors to mingle, eat, shop, attend events, over the course of hours, or for brief interludes in a busy day. There will be no admission charge to the first floor space. It is a place to engage at no cost before proceeding on to view our exhibitions for a modest fee. Evenings will be frequently animated by cultural events staged in a multi-purpose room designed for maximum flexibility. The building itself is a learning environment, infused at each level with education offerings that range from low tech to high tech, from contemplative to interactive, from solitary to group encounters. This building is an opportunity to provide a 21st century model an art museum that anticipates dramatic shifts in how we learn, how we see, and ho we socialize.	Euclid Avenue and Mayfield Road	61	UCI	Website and meeting with Debbie Berry on 08/17/2011	Institutional	2012	Yes	No	Relocated	8501 Carnegie Avenue	77	19	26	34,000 sq ft	0	Retail jobs displaced moved to Abington Arms which is located within the same TAZ	N/A	N/A	N/A

	General Information									Businesses								Residential		
Current/Planned Development Projects	Development project description	Location	Planned TAZ boundary	CDC	Source	Land Use	Estimated Completion	In place regardless of OC	Currently in NOACA's model	New facility or relocated?	If relocated, from where	Previous TAZ boundary	If relocated, estimated # of jobs moved	Estimate # of new jobs:	Building Size	# of residential displacements	# of job displacements	Estimate # of new units	# of residential displacements	# of job displacements
UH Cancer Center	Seidman Cancer Hospital (early 2011), Center for Emergency Medicine (Spring 2011), Neonatal Intensive Care Unit (Spring 2009), and Parking Garage (Fall 2011) Opening in spring 2011, UH Ireland Cancer Center now University Hospitals Seidma Cancer Center, will be one of only 12 freestanding cancer hospitals in the nation designated by the National Cancer Institute (NCI) as a Comprehensive Cancer Center. Hospitals receive this recognition for maintaining high standards of excellenc in patient care, education and clinical research. UH Seidman Cancer Center will allo us new opportunities to continue advancing health care for the community and for professionals all under one roof. Some of the facility's features include: • Patient- and family-centered design: features include inpatient exercise rooms, overnight accommodations for family members, work stations, a multimedia resource center, natural lighting and patient education programs • State-of-the-art technologies and improved treatment options • Access to a healing garden and a stress-reduced environment • 120-bed facility, with the ability to expand to 150 beds • 385,000-square-feet: tripling the square footage that cancer services currently occupy in seven different locations at UH Case Medical Center • Inpatient bed floors with cancer-specific facilities and programs • Outpatient services, including physician clinical offices and patient treatment areas • Clinical care areas organized to treat specific patient populations • Access to the most innovative treatments, including over 300 clinical trials • Teaching and conference facilities to promote ongoing community involvement • Space for future diagnostic and treatment advancements	Euclid Avenue and Cornell Road	68	UCI	Website and meeting with Debbie Berry on 08/17/2011	Institutional	Spring 2011	Yes	No					500 new employees (per E. 105th/ MLK Traffic Study)	120-bed facility, with the ability to expand to 150 beds 385,000 sq ft	0		N/A	N/A	N/A
VA Consolidation	Includes $102 million, 370,000 square foot and 222 bed patient care tower, and a rehabilitation center for the blind. 1300 employees will be relocated from a Brecksvill location (already completed in NOACA model). An additional 132 new jobs will be added for these administration services.	East side of East 105th between Wade Park Ave. and East Blvd	58	UCI	Website and meeting with Debbie Berry on 08/17/2011	Institutional	2014	Yes	Yes	New/Relocated	N/A	N/A	1300 from Brecksville location which has already been implemented in NOACAs model	*222**	370,000 square foot and 222 bed patient	0	0	N/A	N/A	N/A
VA Expansion	Phase III includes 134,783 sq. ft. of rentable office space and a 2,080 space parking garage and 122 bed center for homeless veterans.	West side of East 105th between Wade Park Ave. and East Blvd	57	UCI	Website and meeting with Debbie Berry on 08/17/2011	Institutional	2014	Yes	Yes	New	N/A	N/A	N/A	*540**	134,783 sf of office space	0	0	122	0	0
The Pathology and Laboratory Medicine Institute and Cleveland Clinic Laboratories	The expansion of lab facilities with the building of The Pathology and Laboratory Medicine Institute and Cleveland Clinic Laboratories is expected to add about 350 jobs over five years to the current 1,300 employees working in Northeast Ohio Clinic labs systemwide. The Pathology and Laboratory Medicine Institute touches virtually every patient at Cleveland Clinic and thousands of patients across the world. Laboratory tests are a vital element of diagnosis, treatment planning and monitoring for every disease from the most common to the esoteric. Physicians rely on the specialists in the Institute to provide the expert diagnosis, second opinions and subspecialty consultation that are the basis for effective patient care. The Pathology and Laboratory Medicine Institute is the largest volume hospital laboratory in the state of Ohio and the 15th largest in the United States, with approximately 1,300 dedicated employees and performing more than 12 million tests annually. The Institute provides crucial pathology and laboratory testing services to patients at Cleveland Clinic, the Cleveland Clinic family health centers and externally through Cleveland Clinic Laboratories.	Carnegie Avenue and E. 105th Street	78	UCI	Website and meeting with Debbie Berry on 08/17/2011	Institutional	Fall 2011	Yes	No	New - expansion	N/A	N/A		350	135,000 sq. ft	0	0	N/A	N/A	N/A
Stoke's Corridor	Opportunity for significant new construction of mixed-use office, R&D, and/or warehouse space for medical related businesses or incubator space. Current land along both the east and west sides of Stokes Boulevard between Carnegie and Cedar Avenue includes surface parking lots and three existing buildings, all vacant and owned by UCI.	West side of Stokes between Cedar and Carnegie	269	UCI	Website and meeting with Debbie Berry on 08/17/2011	Mixed Use		Yes	No	New	N/A	N/A	N/A	*196* office jobs, 98* research and development/ lab jobs*	2.26 acres of available land	0	0	N/A	N/A	N/A
		East side of Stokes between Cedar and Carnegie	73	UCI	Website and meeting with Debbie Berry on 08/17/2011	Mixed Use		Yes	No	New	N/A	N/A	N/A	*300* office jobs, 150* research and development/ lab jobs*	3.47 acres of available land	0	0	N/A	N/A	N/A
University Circle Hotel - Courtyard Marriott	UCI, in conjunction with University Hospitals, issued a request for proposals for a hotel development at Euclid Avenue and Cornell Road. UCI is currently working with a preferred developer to finalize a development agreement.	Euclid Avenue and Cornell Road	66	UCI	Website and meeting with Debbie Berry on 08/17/2011	Institutional	2013	Yes	No	New	N/A	N/A	N/A	*100**	153 rooms	0	0	N/A	N/A	N/A
Uptown District Phase I	UCI, in collaboration with ParkWorks and Cleveland Public Art, selected landscape architect CMG of San Francisco to redesign the plaza at the intersection of Euclid Avenue and Mayfield Road. Stakeholder focus groups informed the new design, which includes multiple levels and a variety of seating options, pervious concrete, increased bike parking capacity, native plantings, reclaimed timber benches, and a custom-built LED light fixture that doubles as a public art feature. Local landscape architect McKnight Associates and general contractor F. Buddie Contracting helped make the project a reality.	Euclid Avenue (north side) and Mayfield Road	59	UCI	Website and meeting with Debbie Berry on 08/17/2011	Mixed Use	2012	Yes	No	New	N/A	N/A	N/A	*63**	28,000 square-feet of retail space (including a Barnes & Noble bookstore, a pharmacy, and restaurants)	0	0	50 apartments	0	0
		Euclid Avenue (south side) and Mayfield Road	61	UCI	Website and meeting with Debbie Berry on 08/17/2011	Mixed Use	2012	Yes	No	New	N/A	N/A	N/A	*63**	28,000 square-feet of retail space (including a Barnes & Noble bookstore, a pharmacy, and restaurants)	0	0	50 apartments	0	0
Uptown District Phase II		Euclid Avenue (North side) and Mayfield Road	59	UCI	Website and meeting with Debbie Berry on 08/17/2011	Mixed Use	2015	Yes	No	New	N/A	N/A	N/A	*27**	12,000 square-feet of retail space	0	0	100 apartments	0	0
Hazel Drive Residential Development	UCI issued a request for proposals for a residential development at Hazel Road on the northern end of the district. UCI, working with an advisory committee, interviewed five development teams with various proposals on the site.	Hazel Drive (between Magnolia Drive and East Boulevard)	59	UCI	Website and meeting with Debbie Berry on 08/17/2011	Residential	2012	Yes	No	New	N/A	N/A	N/A	N/A	N/A	N/A	N/A	59 units	0	0
Maximum Accessible Housing of Ohio	The New Circle Vistas project is an opportunity for Maximum Accessible Housing of Ohio to take advantage of a rare set of circumstances. It will provide the best accessible and affordable housing for people with physical mobility disabilities. It will be a model of accessibility with an accessible housing training suite. MOHA is committed to making this project a model of accessible housing. New Circl Vistas will be a 36-unit, four-story apartment building (same number of units as the existing building). The existing building will be used as student housing.	11607 Euclid Avenue	59	UCI	Website and meeting with Debbie Berry on 08/17/2011	Residential	2012	Yes	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	existing 36 units will be moved to new building and existing will be used as student housing	N/A	N/A

** = HNTB estimated the number of new jobs with land-use specific conversion factors applied to the size of the building or vacant space*

Note: Development and redevelopment projects listed are those anticipated regardless of construction of Opportunity Corridor

LEGEND

- Opportunity Corridor Study Area
- Recommended Preferred Alternative Centerline
- Recommended Preferred Alternative Preliminary Right of Way

Wade Park Ave
E. 105th St
Hough Ave
E. 30th St
E. 40th St
Chester Ave
Euclid Ave
Carnegie Ave
Cedar Ave
E. 55th St
E. 71st St
E. 79th St
Central Ave
Quincy Ave
Mayfield Rd
Broadway Ave
Woodland Ave
Buckeye Rd
Shaker Blvd
Woodhill Rd
E. 116th St
Kinsman Rd
E. 130th St
Interstate 77
Interstate 490
US 20
US 322
US 43
US 422
US 87

CLEVELAND OPPORTUNITY CORRIDOR OHIO DEPARTMENT OF TRANSPORTATION

CUY - Opportunity Corridor
(PID 77333)
Cleveland, OH

Date: 02/20/2012

Prepared by: VNW

Note:
GIS data used to create this map are from the best sources available. Use of this map should be used only for planning purposes.
Aerial image is dated (circa 2009) and is shown only for illustrative purposes.

0 0.25 0.5 1 Miles

NORTH

Figure 1:
Project Study Area

DEPARTMENT OF TRANSPORTATION UNITED STATES GOVERNMENT

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

LEGEND

Preliminary Indirect and Cumulative Effects Study Area

Recommended Preferred Alternative Centerline

Recommended Preferred Alternative Preliminary Right of Way

Current and Planned Development by CDC:

Buckeye Development Corporation

Burten Bell Carr Development Corporations

Slavic Village Development

Fairfax Renaissance Development Corporation

University Circle Incorporation

Wade Park Ave
VA Expansion
Hazel Dr
VA Consolidation
MAHO
CIA
Cleveland Museum of Art Expansion
Uptown District
MOCA
University Circle Hotel
Lot 45
UH Cancer Center
CWRU West Campus
CWRU Performing Arts
Hough Ave
Chester Ave
Euclid Ave
Rumi's Market
CCF Heart Center
Carnegie Ave
Pathology Institute and CCF Lab
Cedar Ave
GCIC
Tudor Arms Hotel
Stokes Corridor
New Economy Neighborhood
Mayfield Rd
E. 40th St
E. 55th St
E. 71st St
E. 79th St
E. 1
Central Ave
Intergenerational Housing
Karamu Campus
Quincy Ave
Shops at Emmanuel Square
Cuyahoga County Juvenile Justice Center
Broadway Ave
Woodland Ave
Maingate Market Place
Hill Place & Dell Ave Homes
Orlando Expansion
Buckeye Rd
Green City Growers
Miceli's Expansion
St. Lukes Pointe
Shaker Blvd
Heritage View Homes
Bridgeport Place
Woodhill Rd
E. 116th St
Urban Agriculture Innovation Zone
Hyacinth Neighborhood Plan (2015)
Heritage View Homes
Kinsman Rd
CMHA Headquarters
Kingsbury Crossings
E. 130th St
20
322
77
43
422
87
490

CUY - Opportunity Corridor
(PID 77333)
Cleveland, OH
March 2012

Date: 02/20/2012

Prepared by: VNW

Note:
GIS data used to create this map are from the best sources available. Use of this map should be used only for planning purposes.

0 0.25 0.5 1 Miles

NORTH

Figure 2:
Preliminary Indirect and Cumulative Effects Study Area with Current and Planned Development Projects

LEGEND

- Residential
- Service-Office
- Retail
- Light Manufacturing
- Final Indirect and Cumulative Effects Study Area
- Recommended Preferred Alternative

Lexington Ave
Hough Ave
Payne Ave
Prospect Ave
Chester Ave
Euclid Ave
Carnegie Ave
Cedar Ave
Central Ave
Quincy Ave
Woodland Ave
Beaver Ave
Rawlings Ave
Holton Ave
Rosehill Ave
Buckeye Rd
Bower Ave
Maurice Ave
Kinsman Ave
Bessemer Ave
Broadway Ave
Mayfield Rd
Cedar Glen
Fairmount Blvd
Fairhill Rd
Mt Carmel Rd
Larchmere Blvd
S Moreland Blvd
MLK Jr Dr
East Blvd
Baldwin Rd
Woodhill Rd
E. 105th St
E. 103rd St
E. 89th St
E. 79th St
E. 75th St
E. 71st St
E. 65th St
E. 55th St
E. 40th St
E. 35th St
E. 30th St
E. 116th St
I-90
I-490
I-77
322
20
422
87
43
77
490

CUY - Opportunity Corridor
(PID 77333)
Cleveland, OH

Date: 06/06/2012

Prepared by: JLS

Note:
Greater Cleveland Partnership (2011, Sep 30). Opportunity Corridor High-level Land Use Analysis & Economic Impact Analysis.

NORTH

Figure 3A
2020 Market Demand

LEGEND

- Residential
- Service-Office
- Retail
- Light Manufacturing
- Final Indirect and Cumulative Effects Study Area
- Recommended Preferred Alternative

Lexington Ave
Hough Ave
Payne Ave
Prospect Ave
Chester Ave
Euclid Ave
Carnegie Ave
Cedar Ave
Central Ave
Quincy Ave
Woodland Ave
Beaver Ave
Rawlings Ave
Holton Ave
Bower Ave
Maurice Ave
Kinsman Ave
Bessemer Ave
Rosehill Ave
Buckeye Rd
Mayfield Rd
Cedar Glen
Fairmount Blvd
Fairhill Rd
Mt Carmel Rd
Larchmere Blvd
S Moreland Blvd
Broadway Ave
I-90
I-490
I-77
MLK Jr Dr
East Blvd
Baldwin Rd
Woodhill Rd
E. 30th St
E. 35th St
E. 40th St
E. 55th St
E. 65th St
E. 71st St
E. 75th St
E. 79th St
E. 89th St
E. 103rd St
E. 105th St
E. 116th St
322
20
43
77
422
87
490

CUY - Opportunity Corridor
(PID 77333)
Cleveland, OH

Date: 06/06/2012

Prepared by: JLS

Note:
Greater Cleveland Partnership (2011, Sep 30). Opportunity Corridor High-level Land Use Analysis & Economic Impact Analysis.

NORTH

Figure 3B
2030 Market Demand

LEGEND

- Residential
- Service-Office
- Retail
- Light Manufacturing
- Final Indirect and Cumulative Effects Study Area
- Recommended Preferred Alternative

Lexington Ave
Hough Ave
Payne Ave
322
20
Prospect Ave
I-90
Central Ave
Quincy Ave
E. 30th St
E. 35th St
E. 40th St
E. 55th St
E. 71st St
E. 89th St
E. 105th St
MLK Jr Dr
East Blvd
Mayfield Rd
Chester Ave
Euclid Ave
Carnegie Ave
Cedar Ave
E. 103rd St
Cedar Glen
Fairmount Blvd
Baldwin Rd
Fairhill Rd
Mt Carmel Rd
Woodhill Rd
MLK Jr Dr
Larchmere Blvd
43
77
422
87
Broadway Ave
Woodland Ave
Beaver Ave
E. 73rd St
E. 75th St
Rawlings Ave
Rosehill Ave
Buckeye Rd
Holton Ave
Bower Ave
Kinsman Ave
I-490
490
Maurice Ave
E. 65th St
I-77
Bessemer Ave
MLK Jr Dr
E. 116th St
S Moreland Blvd

CUY - Opportunity Corridor
(PID 77333)
Cleveland, OH

Date: 06/06/2012

Prepared by: JLS

Note:
Greater Cleveland Partnership (2011, Sep 30). Opportunity Corridor High-level Land Use Analysis & Economic Impact Analysis.

NORTH

Figure 3C
2040 Market Demand

LEGEND

- Residential
- Service-Office
- Retail
- Light Manufacturing
- Final Indirect and Cumulative Effects Study Area
- Recommended Preferred Alternative

Lexington Ave
Hough Ave
Payne Ave
322
20
Prospect Ave
I-90
Central Ave
Quincy Ave
E. 30th St
E. 35th St
E. 40th St
E. 55th St
E. 71st St
E. 89th St
E. 105th St
MLK Jr Dr
East Blvd
Mayfield Rd
Chester Ave
Euclid Ave
Carnegie Ave
Cedar Ave
E. 103rd St
Cedar Glen
Fairmount Blvd
Baldwin Rd
Fairhill Rd
Mt Carmel Rd
Woodhill Rd
MLK Jr Dr
Larchmere Blvd
43
77
422
87
Broadway Ave
Woodland Ave
Beaver Ave
E. 75th St
E. 79th St
Rawlings Ave
Rosehill Ave
Buckeye Rd
Holton Ave
Bower Ave
490
I-490
Kinsman Ave
Maurice Ave
E. 65th St
I-77
E. 116th St
S Moreland Blvd
Bessemer Ave

CUY - Opportunity Corridor
(PID 77333)
Cleveland, OH

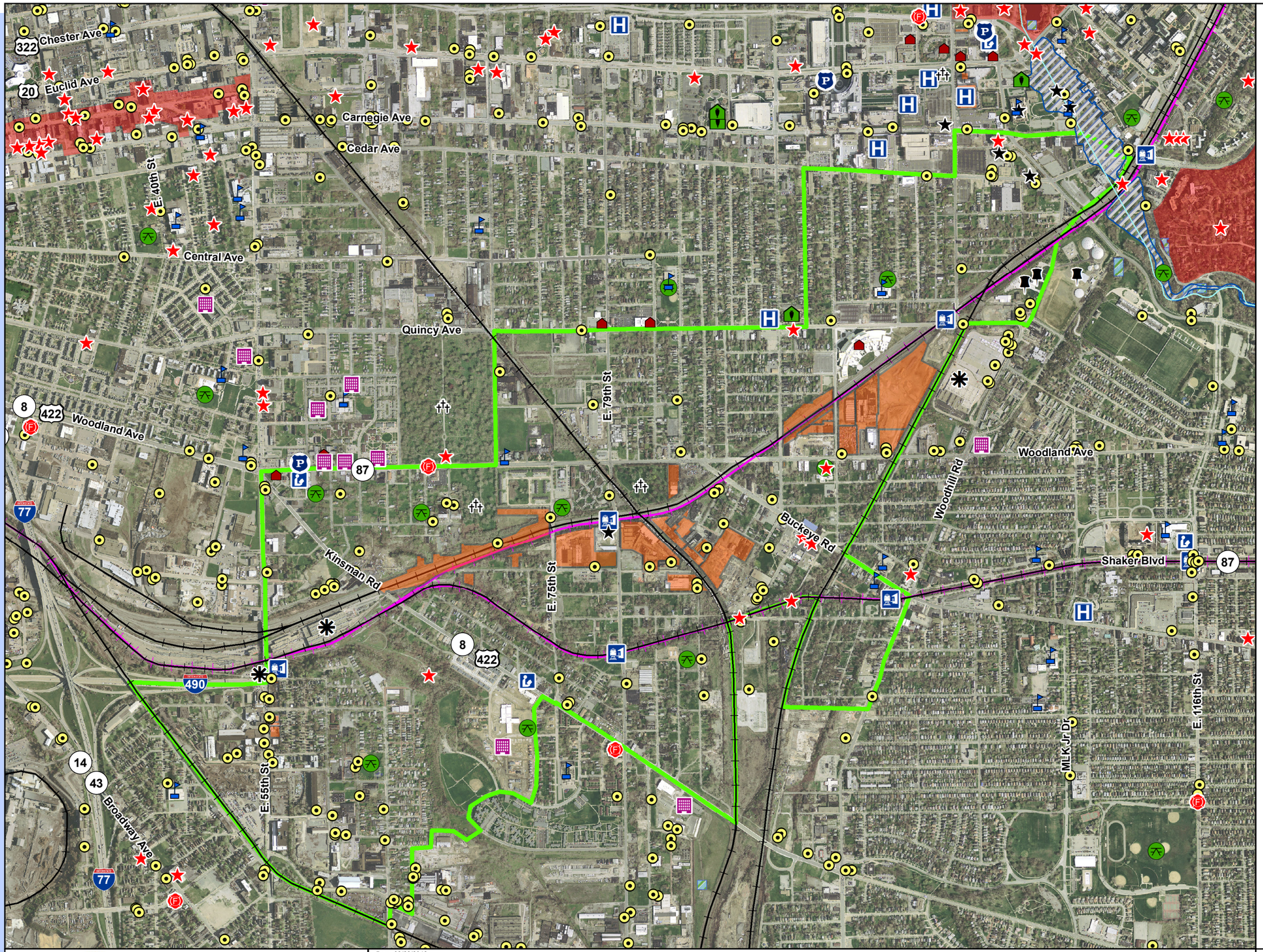
Date: 06/06/2012

Prepared by: JLS

Note:
Greater Cleveland Partnership (2011, Sep 30). Opportunity Corridor High-level Land Use Analysis & Economic Impact Analysis.

NORTH

Figure 3D
Total Growth Allocation
(2020-2040)



Legend

- Final Indirect and Cumulative Effects Study Area
- Cemetery
- Cuyahoga Metropolitan Housing Authority (CMHA)
- Community Services
- Cultural Facilities
- Educational Facilities
- Fire Stations
- Police Stations
- Health Facilities
- Libraries
- NRHP Listed/Eligible Resources
- Potentially Historic Resources
- Parks/Playgrounds/Recreation Centers
- Potential Hazardous Materials Sites (from secondary sources)
- Phase I ESA Sites (from project studies)
- Doan Brook
- Utilities
- 100-Year Floodplain
- Potential Wetlands
- NRHP Historic District
- RTA Services and Facilities
- RTA Rail Stations
- Active Freight Rail
- RTA Rail

CUY - Opportunity Corridor
(PID 77333)
Cleveland, OH

Date: 02/22/2012

Prepared by: SDL

Note:
GIS data used to create this map are from the best sources available. Use of this map should be used only for planning purposes.

0 0.25 0.5 1 Miles

NORTH

Figure 4:
Notable Features Overview Map

Legend

- Residential
- Institutional
- Manufacturing
- Recreation
- Retail
- Service-Office
- Transportation
- Vacant
- Recommended Preferred Alternative
- Final Indirect and Cumulative Effects Study Area

Carnegie Ave
Cedar Ave
E. 55th St
E. 71st St
E. 79th St
Quincy Ave
Broadway Ave
87
Woodland Ave
Buckeye Rd
GCRTA Red Line
GCRTA Blue and Green Line
NS Nickelplate Line
490
422
Kinsman Rd
Woodhill Rd
CSX Mainline
NS Cleveland Mainline
E. 116th St
77

CUY - Opportunity Corridor
(PID 77333)
Cleveland, OH

Date: 07/13/2012

Prepared by: TVF

Note:
The information for this figure was generated using City of Cleveland 2005 Land Use GIS data. The data for parcels within the boundaries of the final ICE study area were updated based on 2011 aerial photography.

0 0.25 0.5 1 Miles

NORTH

Figure 5A:
Existing Land Use

Legend

- Residential
- Institutional
- Manufacturing
- Recreation
- Retail
- Service-Office
- Transportation
- Mixed Use
- Recommended Preferred Alternative
- Final Indirect and Cumulative Effects Study Area

Carnegie Ave
Cedar Ave
E. 55th St
E. 71st St
E. 79th St
Quincy Ave
87
Woodland Ave
Buckeye Rd
GCRTA Red Line
GCRTA Blue and Green Line
NS Nickelplate Line
490
422
Kinsman Rd
CSX Mainline
Woodhill Rd
E. 116th St
77
NS Cleveland Mainline

CUY - Opportunity Corridor
(PID 77333)
Cleveland, OH

Date: 07/13/2012

Prepared by: TVF

Note:
The information for this figure was generated using City of Cleveland 2005 City Proposed Plan.

0 0.25 0.5 1 Miles

NORTH

Figure 5B:
Future Land Use